

ABSTRACT

Most of the canals in Bangkok are polluted. They have lost some of their important function as source of clean water, the aquatic animal habitat, and an important transportation route of Bangkokian. And they become merely a waste water receptor of Bangkok. This is the result of a rapidly increase in waste water generated by households and industries in Bangkok.

Recently, two canals, Mahanag and San Sab, have been reused as transportation route due to the serious traffic congestion in Bangkok. Traveling by boat along these canals saves a considerable amount of time, when compared to road transportation. Therefore, there are more than 30,000 passengers using the two canals daily. But the two canals are very polluted. The BOD level is greater than the standard quality which is 4 mg/l. The polluted water effects both the passengers and households living along the canal banks.

The objective of this study is to estimate the passengers maximum willingness to pay for a clean-up of Mahanag and San Sab Canals in order to provide an information about the source of fund for financing the project. The reason for selecting these canals is they are the most important canals used for transportation.

The Contingent Valuation approach was applied as a method to estimate the willingness to pay of the canal clean-up. The survey was conducted during October, 23-30, 1995, at 5 piers along the canals. The sample size is 206 passengers

The finding show that the most users were willing to make contribution to the canal clean-up project. Ordinary least square (OLS) and Tobit, were applied to estimate the maximum monetary value that the sample willing to pay for the canal clean-up project. The amount of money that they offer vary significantly at 95 percent level with income, age, distance of travel, the trust in the project success and availability of alternative transportation.

The aggregate value of Mahanag and San Sab Canals clean-up project is estimated from Tobit model, since the parameter estimates from OLS is inconsistent and result in biased predicted willingness to pay. The aggregate value of the canal

clean-up project is about 274 million baht per year. The average willingness to pay from the total sample based on median is 360 baht per year.

The findings provides the following policy implications. First , Bangkok Metropolitan Administration (BMA) should clearly inform the public about the canal clean-up project. Second, BMA should collect a waste water treatment fee from households in order to make passengers feel that it is fair for them to pay for the project. Third, promotion of the importance of the canal clean-up should focus especially on adult persons, since they have ability to pay. Finally, the money collected from the passengers for the canal clean-up project should not be too high. Otherwise, they may not pay for the project.

This study has two limitations. First, the estimated value is only a part of total value of the clean-up project. The study did not include other beneficiary groups such as households living along the canals and the rest of Bangkokian. Second, there is a starting point bias, so the further research should adjust the starting bid.